

CLAIMS

1. A method for joining components of thermostatic systems and thermal relays for low-voltage circuit breakers, said components being constituted by at least one bimetallic element constituted by a lamina with a first face and a second face and at least one connection element that has a substantially flat end part with a third face and a fourth face, characterized in that it comprises the steps that consist in:
 - overlapping and coupling the end part of the first face of said bimetallic element with respect to the third face of the end part of said connection element;
 - subjecting the end part of the second face of said bimetallic element to the welding action of laser means to provide a weld between said bimetallic element and said connection element.
2. The method for joining components of thermostatic systems and thermal relays for low-voltage circuit breakers according to claim 1, characterized in that said laser means scan the second face of said bimetallic element along a predefined path.
3. The method for joining components of thermostatic systems and thermal relays for low-voltage circuit breakers according to claim 2, characterized in that said predefined path follows a curved profile.
4. The method for joining components of low-voltage circuit breakers according to claim 2, characterized in that said predefined path follows one or more mixed, open or closed lines, also in the variation of parallel repetitions.
5. The method for joining components of low-voltage circuit breakers according to one or more of the preceding claims, characterized in that said laser means are constituted by a solid-state laser.
6. The method for joining components of low-voltage circuit breakers

according to one or more of the preceding claims, characterized in that at least one connection element is constituted by the circuit breaker protection relay connection.

- 5 7. The method for joining components of low-voltage circuit breakers according to one or more of claims 1 to 6, characterized in that at least one connection element is constituted by a connecting braid.
8. Components of low-voltage circuit breakers obtained with a method according to one or more of the preceding claims.
9. The low-voltage circuit breaker, comprising one or more components
10 according to claim 8.